

## GP-1 Instructions and Information

For office use only:

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

- ☐ COMPLETE
- ☐ INCOMPLETE
- ☐ DOES NOT QUALIFY FOR GENERAL PERMIT

### **I. Diesel-Electric Generator Facility Operating Permit GP-1 Application**

- ☐ The \$300 retainer is included. (18 AAC 50.400(b)(9)). The department will not begin review until this retainer fee is collected.

Alaska law requires operators of diesel-electric generating facilities to obtain an operating permit if the plant meets any of the following criteria:

- a potential to emit greater than 100 tons per year of a regulated air contaminant,
- a combustion source with a rated capacity greater than 100 MMBtu/hr, or
- a combustion source with emission control equipment with a rated capacity greater than 50 MMBtu/hr.

Alaska law allows ADEC to issue general operating permits under AS 46.14.210 to similar types of operations. Operators prefer general operating permits because of their relative low cost as compared to facility specific permits.

This is an application to obtain a general operating permit for qualifying diesel-electric generating facilities. To obtain a general operating permit, you must complete this application and send it to:

Alaska Department of Environmental Conservation  
Air Permits Program  
555 Cordova Street  
Anchorage, Alaska 99501

You will be notified within 60 days after receipt of the application if you qualify and your application is complete. As soon as your application is complete, you will be sent the general operating permit.

#### **Instructions**

Please provide all of the information on the left-hand side of the application pages. Instructions are provided on the right-hand side of the pages.

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### **II. Diesel-Electric Generator Facility General Operating Permit Qualifying Criteria Checklist**

1. Does your facility produce electricity using diesel-fired engines?

**" Yes** (continue to next question)

**" No** (You do not qualify for this permit)

Answer questions 2 - 4 to decide if you need a permit.

2. Does your facility have the potential to emit of 100 tons per year or more of a regulated air contaminant?

**" Yes** (Continue to next question)

**" No** (Skip to question 4)

3. Does your facility burn 330,000 gallons or more of diesel fuel per year?

**" Yes** (You need a permit. Skip to question 5) **" No** (If you also answer No to question 4, you may qualify for a pre-approved limit instead of a permit. Contact ADEC)

4. Does the facility contain a 100 Million Btu/hr boiler or heater, or a 50 million Btu/hr boiler or heater with an emission control device?

**" Yes** (You need a permit. Continue with next question.) **" No** (Check 18 AAC 50.325 or contact ADEC to find out if you need a permit)

5. Was your facility built or modified since August 7, 1977?

**" Yes** (Continue on)

**" No** (Skip to question 7)

6. Did you obtain all required air quality permits before building or modifying your facility?

**" Yes** (Continue on)

**" No** (You do not qualify for this permit)

### Instructions for Page 2.

**Criterion #1:** This general permit is only designed for diesel-electric generating facilities. If the majority of your facility's operations are not electricity production, contact the department to request a different general or operating permit. A facility that also has heaters or boilers can operate under this permit as long as the facility meets the rest of the criteria in this application.

#### Do you need a permit?

**Criteria #2 and #3: Potential to emit** is computed based on operation at full capacity all year, unless you have an enforceable limit on your operation. Your **potential to emit** a regulated air contaminant is more than 100 tons per year if, you do not have an enforceable limitation on fuel consumption or hours of operation, and you have

- Small diesel engines ( $\leq 600$  hp each) which add up to a total of 736 hp or more, or
- Large diesel engines ( $>600$  hp each) which add up to a total of 1140 hp or more

If you burn less than 330,000 gallons of fuel per year, your *actual* emissions are probably less than 100 tons per year. If so, you may be able to get an enforceable limit to keep your *potential* emissions below 100 tons using 18 AAC 50.230, PRE-APPROVED LIMITS. If you don't need a permit for some other reason (See question 4 and 18 AAC 50.325), reducing potential emissions below 100 tons per year will eliminate the need for a permit.

Call the department at 465-5100 for help in figuring out your potential to emit, or to find out more about pre-approved limits.

**Criterion #4:** You need an operating permit if your facility contains any single piece of fuel burning equipment that is large enough. The thresholds are (1) a rated heat input capacity of 100 million Btu per hour, or (2) 50 million Btu per hour, if an emission control device is needed in order to comply with an emission standard in 18 AAC 50.055. Note: This criterion does **not** mean you need a permit just because you have some smaller units that add up to that amount.

There are other reasons you may need a permit, such as being subject to a federal emission standard. But you will need a facility specific permit or a different general permit. 18 AAC 50.325 gives the complete list of facilities needing operating permits.

**Criterion #5:** Check yes if the facility construction began after August 7, 1977. Also check yes if the facility added or changed its equipment or operation in a manner that increased emissions.

**Criterion #6** Check yes if, to the best of your knowledge, you obtained all required air quality control permits for building or modifying your facility. You do not have to re-examine past decisions on whether a permit was required. However, nothing in this permit excuses any past violation.

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### Qualifying Criteria Checklist - (Continued)

Answer questions 7-9 to find out if you can use this general permit.

7. Does your facility have a fuel consumption limit or other facility-specific requirement established in a construction permit or in an air quality control permit issued under the former 18 AAC 50.400?

" **Yes** (You do not qualify for this permit. Contact ADEC) " **No** (Continue to next question)

8. If the facility is located in Dutch Harbor/Unalaska or St. Paul and built after January 18, 1997, does the facility contain a combustion source with a rated capacity of 10 MMBtu/hour or more?

" **Yes** (You do not qualify for this permit. Contact ADEC) " **No** (Continue to next question)

9. Does the facility contain any of the following:

" **Yes** " **No** A boiler subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc

" **Yes** " **No** A gas turbine

" **Yes** " **No** A fuel storage tank subject to 40 C.F.R. 60, Subparts K, Ka, or Kb, unless the only requirement that applies is record keeping under Subpart Kb, § 116b(a) and (b)

" **Yes** " **No** A source subject to any other federal emission standard in 40 C.F.R. 60, 61, or 63; except for a wood stove for space heating, or an asbestos demolition/renovation project.

" **Yes** " **No** An incinerator

" **Yes** " **No** A source subject to any standard in 18 AAC 50.055(a) - (f) other than, the general standards for fuel burning equipment in (a)(1), and (c)

" **Yes** " **No** Open burning

A **Yes** answer to **any** item in question 9 means you do not qualify for this permit, contact ADEC.

A **No** answer to **all** items in question 9 means you may apply for this general permit.

**Instructions for Page 4.**

**Is this the right permit?**

**Criterion #7:** General permits do not contain facility-specific requirements. A facility-specific requirement is a case-by-case limit that applies through a construction permit, or an operating permit under the former 18 AAC 50.400. They include

- A BACT requirement
- A LAER or requirement or limitation to provide offsets in a non attainment area
- A limit to comply with:
  - Ambient air quality standards;
  - Maximum allowable ambient concentrations; or
  - 18 AAC 50.110, protection of public health or welfare
- Emission trading
- A limit to avoid a requirement.

**Criterion #8:** If your facility is located in one of these mentioned areas, it is operating in a special protection area. The department predicts that air quality in special protection areas may not be as healthy as in non-special protection areas. Therefore, any new or temporary source that operates in a special protection area is subject to ambient air quality demonstrations.

**Criterion #9:** You cannot use this permit if you have any of the equipment listed in question 9. Requirements that would apply to your facility are not listed in the permit. Contact the department if you need help deciding if any item in #9 applies.

There are three federal standards that are included in the permit. If you have any of these you can still use GP-1:

- 40 C.F.R. 60, Subpart Kb, Section 116b - Keeping a record of tank size for tanks that are small or that store only low volatility fuel. *(If an actual emission control requirement applies through some other section of Kb, then you cannot use GP-1.)*
- 40 C.F.R. 63.145 - Asbestos demolition/renovation. See permit Condition 15.
- 40 C.F.R.82.150 - Protection of Stratospheric Ozone. See permit Condition 16.

A federal standard applies to wood stoves, but does not put any obligation on the operator. If you have a wood stove use only for space heat you can still use this permit.

If you have equipment subject to any other federal emission standard, you cannot use this permit because those limits are not in the permit. The qualifying criteria specifically exclude certain boilers, turbines, and fuel storage tanks from the permit. These are subject to federal limits not listed in the permit and are often used at power plants.

The last three items in question 9 relate to state emission standards that are not in the permit.

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### III Identification Information

Facility Name \_\_\_\_\_  
Facility Contact Person \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Physical Address \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
UTM Coordinates or \_\_\_\_\_  
Latitude/Longitude \_\_\_\_\_

Legal Owner \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Operator (*if different from owner*) \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Facility's Consultant \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Designated Agent \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Billing Contact Person \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone Number \_\_\_\_\_

Individuals from your organization, Authorized to Incur Fees

\_\_\_\_\_

#### **SIC Codes:**

4911 for electric services - electric power generation, transmission, or distribution.

4931 for electric and other services combined - electric services are the major part but less than 95% of the total

**Instructions for Page 6**

**Provide the following information. Where applicable please provide fax numbers and e-mail address.**

**Facility Name** - the name of the facility that is applying for this permit.

**Facility Contact Person** - the name of the individual responsible for the facility's day-to-day operations.

**Telephone Number** - the contact person's telephone number.

**Physical Address** - the facility's address. This should include a street number or legal description of the property. For a portable facility operating at a location without an address, describe the location to the nearest landmark.

**Mailing Address** - if different from the physical address, the address where the facility receives mail.

**UTM Coordinates** - the facility's Universal Transverse Mercator (UTM) coordinates.

**Latitude/Longitude** - the facility's Latitude and Longitude coordinates. Provide either the UTM or the Latitude/Longitude coordinates of the facility.

**Legal Owner** - the facility's legal owner. The legal owner could be either a person or a separate company.

**Mailing Address** - the owner's mailing address.

**Telephone Number** - the owner's telephone number.

**Operator** - if different from the owner, the operator's name. The operator could be either a person or a separate company.

**Mailing Address** - the owner's mailing address.

**Telephone number** - the owner's telephone number.

**Consultant Name** - the name of the business or entity that is preparing the application.

**Mailing Address** - the consultant's mailing address

**Telephone Number** - the consultant's telephone number

**Designated Agent** - the designated agent's name. The regulations allow permittees to designate an individual responsible for permit matter. The designated agent could be a person, a separate company, or a law firm.

**Mailing Address** - the designated agent's mailing address.

**Telephone Number** - the designated agent's telephone number

**Billing Contact** - the billing contact's name

**Mailing Address** - the billing contact's mailing address.

**Telephone Number** - the billing contact's telephone number.

**Individuals Authorized to Incur Fees** - The department charges \$78/hour for staff time. Staff time includes answering questions, working on applications, and issuing permits. List any individual with your organization that you authorize to incur department fees. Please include any consultants that you want the Department

**IV. Source Information****Table SI-1. Diesel Electric Generator Source Inventory**

<b>ID No.</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Date Installed</b>	<b>Engine Rating (Hp)</b>	<b>Generator Rating (kW)</b>

**Table SI-2. Diesels That Are Insignificant Sources**

<b>List the engines from Table SI-1 that are insignificant. See instructions on page 9.</b>	<b>Id No.</b>



## GP-1 Instructions and Information

### Instructions for Page 8

#### Table SI-1. Diesel-Electric Generator Source Inventory

For each diesel engine at your facility, fill out one line of the table

#### Table SI-2. Diesels That Are Insignificant Sources

A diesel engine is insignificant if it emits less than 2 tons per year of nitrogen oxides ( $\text{NO}_x$ ). Using EPA's emission factors in AP-42, Table 3.3-2, an engine will emit less than two tons of  $\text{NO}_x$  per year if it burns less than 6,600 gallons per year of diesel fuel.

If a source is insignificant, the operator will not need to do monthly visible emission inspections for that equipment. Equipment still must comply with the emission limit for opacity.

For each engine from Table SI-1 that will burn less than 6,600 gallons per year for every year of the permit, you may list the engine ID number in Table SI-2. You will need to keep fuel consumption records for this engine if you want it to be considered insignificant.

Note: Under GP-1, visible emission inspections are not always required even for engines that are not insignificant. You do not need to do a monthly visible emission inspection if either:

- the engine is insignificant, or
- the engine will be used for less than 40 hours during that calendar month.

**Source Information  
(Continued)**

**Table SI-3. Heaters, Boilers, and Other Fuel Burning Equipment**

<b>Id No.</b>	<b>Equipment Type</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Date Installed</b>	<b>Heat Input Rating (MMBtu/hr)</b>	<b>Fuel or Fuels</b>

**Table SI-4. Fuel Storage Tanks**

<b>Tank ID No.</b>	<b>Capacity</b>	<b>Date Installed</b>	<b>Fuel Stored</b>

**Instructions for Page 10.****Table SI-3. Heaters, Boilers, and Other Fuel Burning Equipment**

For each piece of fuel burning equipment that is not a diesel engine, fill out one line of the table.

In the second column, say what type of equipment it is - whether a heater, boiler, etc. If it is not a heater or boiler, specify what it is.

If a source is insignificant, the operator will not need to do monthly visible emission inspections for that equipment. Equipment still must comply with the emission limit for opacity.

Some heaters and boilers are insignificant. This depends on the heat input rating, and the fuel used. This is shown in the following table.

**Insignificant Heaters and Boilers**

Fuel	Heat Input Rating Less Than:
Kerosene, No. 1, No. 2 diesel or fuel oil	1,700,000 Btu per hour
Used oil	300,000Btu per hour

**Table SI-4. Fuel Storage Tanks**

For each fuel storage tank with a capacity larger than 10,000 gallons fill out one line of Table SI-4. In the second column list the unit of measurement (gallons, barrels, etc.)

## V. Emission Calculations for Emission Fees

**Calculate emissions from fuel records from previous January 1 through December 31. Make the calculations and provide assessable emissions estimate to ADEC no later than March 31.**

Send calculations to

Alaska Department of Environmental Conservation  
Air Emissions Estimate  
410 Willoughby Avenue Suite 303  
Juneau, Alaska 99801

Use the emission factors in the table below to make the assessable emissions estimate. First, enter the table by determining into which range the fuel consumption of the facility for the previous year falls. Identify the appropriate emission factor associated with the range of fuel consumed. Multiply the actual amount of fuel consumed by the emission factor to determine the tons of emissions. Multiply the tons of emissions by \$5.07 per ton. See the example below the table.

Range of Fuel Consumption gallons	Multiply By Emission Factor	Tons of Emissions
0 to 33096	Zero	Zero assessable
33096 to 153846	0.000302 tons/gal	
153846 to 281690	0.000367 tons/gal	
281690 to 416666	0.000402 tons/gal	
416666 to 476190	0.000426 tons/gal	
Over 476190	0.000447 tons/gal	

Example: Last year your power plant consumed 300,000 gallons of diesel fuel. 300,000 gallons falls into the range between 281,690 to 416,666 gallons. The appropriate emission factor is 0.000402 tons per gallon. Multiply the actual amount of fuel consumed (300,000 gallons) by the emission factor as follows.

$$300,000 \text{ gals} \times 0.000402 \text{ tons / gal} = 120.6 \text{ tons}$$

Multiply the tons times the fee per ton which is \$5.07 / ton

$$120.6 \text{ tons} \times \$5.07 / \text{ton} = \$611.44 \text{ emission fee}$$

**VI. Other Documents Required**

In addition to this application please include:

Facility layout sketches.

Preventative maintenance plans for all diesel engines and for other fuel burning equipment with a heat input rating greater than 10 million Btu per hour.

**Instructions for Page 12.**

**Emission Fee Information**

See sample calculation in Section V. Emission fees must be calculated and submitted to the department once a year no later than March 31.

If the department increases the emission fees by regulation, the facility should replace the \$5.07 with the new value and recalculate the emission fees due. The department also allows facilities to submit their own emission fee calculations.

**Permit Administration and Emission Fees Due**

For facilities that are required to have a permit for the first time, the first year's emission fees must be paid with the application.

For all subsequent years, emission fees will be billed by July 1. Fees are due within 60 days of the billing date.

Permit administration fees are billed at \$78 per hour for Air Permits staff time. The application for a general permit must include a \$300 retainer for permit administration fees.

**Other Documents Required**

Include with the application facility layout sketches that show the facility configuration. Identify each emission point, and control device if there are any.

Include a preventative maintenance plan with the application. The plan could be the manufacturer's recommended maintenance plan for the piece of equipment, or it could be a plan tailored to your individual facility. The plan must cover all engines, and all other fuel burning equipment with a heat input of rating greater than 10 million Btu per hour.

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### VII. Compliance Certification

**Instructions for pages 14 and 15:** In order to operate under this general operating permit, you must certify compliance with Alaska's emission standards.

Permittee: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Certification Period: \_\_\_\_\_

Condition	Compliance Status	Continuous/Intermittent	Method used to determine compliance
1 - 6	These conditions place no certification obligation on permittee		
7	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" Dates access granted, or not requested ' Access not requested " Other (attach description & documentation)
8	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" Dates information requested and submitted ' No information requested " Other (attach description & documentation)
9	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All reports/documents certified " Dates submitted: Excess emission reports Semiannual reports Compliance certifications
10 - 14	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" Dates source test requested and submitted ' No source test requested " Other (attach description & documentation)
15	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept ' No asbestos demolition/renovation done " Other (attach description & documentation)
16	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept ' No refrigerants handled " Other (attach description & documentation)
17	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All inspections made and records kept " Other (attach description & documentation)
18	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept " Other (attach description & documentation)
19	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept " Other (attach description & documentation)
20	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept " Other (attach description & documentation)
21.1	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	" All records kept ' No potentially injurious emission observed or complaints received " Other (attach description & documentation)
21.2	" In Compliance " Not in Compliance " Not Applicable	" Continuous " Intermittent	' Equipment design does not allow dilution of emissions " Other (attach description & documentation)

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### Compliance Certification

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

State of Alaska, City of \_\_\_\_\_, Borough of \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 19\_\_ before me personally appeared \_\_\_\_\_, whose identity was proved to me on the basis of satisfactory evidence to be the person whose name is subscribed in this instrument, and acknowledged that he (she) executed the same.

\_\_\_\_\_  
Notary Public

My Commission Expires on \_\_\_\_\_

### Addresses

Please send the completed application to:

ADEC

Air Permits Program

555 Cordova Street

Anchorage, AK 99501

And

USEPA

1200 6<sup>th</sup> Avenue

Mail Stop OAQ-107

Seattle, WA 98101